

CLAIMS

1. A mobile device for receiving supplementary information transmitted with a radio station signal, said mobile device comprising:

5 means for scanning a spectrum of frequencies;

means for detecting a plurality of radio stations broadcast within said spectrum of frequencies;

means for decoding, for each of a plurality of detected radio stations, at least one piece of supplementary information broadcast in conjunction with the plurality of radio stations;

means for inputting a search criterion;

means for generating a set of radio stations whose supplementary information matches said search criterion; and

means for selecting one of the set of radio stations whose supplementary information matches said search criterion.

2. A mobile device as claimed in claim 1, comprising means for displaying a set of at least one piece of supplementary information, each of said at least one piece of supplementary information relating to a corresponding radio station.

3. A mobile device as claimed in claim 2, wherein said display means is suitable for concurrently displaying a plurality of elements of the set of at least one piece of supplementary information.

4. A mobile device as claimed in claim 2, wherein said display means is arranged to display only one element of the set of at least one piece of supplementary information at a time.

5. A mobile device as claimed in claim 2, 3 or 4, wherein said selecting means is arranged to select one of the plurality of radio stations from the supplementary information displayed by said display means.

5 6. A mobile device as claimed in any preceding claim, wherein said display means displays the set of radio stations whose supplementary information matches said search criterion.

10 7. A mobile device as claimed in claim 6, wherein said set of radio stations whose supplementary information matches said search criterion comprises one or more radio stations

15 8. A mobile device as claimed in claim 2, wherein the set of the at least one piece of supplementary information comprises a piece of supplementary information for each radio station detected having supplementary information broadcast therewith.

20 9. A mobile device as claimed in any preceding claim, wherein said search criterion comprises at least a part of a piece of supplementary information.

10. A mobile device as claimed in any preceding claim, wherein at least one piece of supplementary information received in respect of one of the plurality of radio stations comprises a station name.

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11. A mobile device as claimed in any preceding claim, wherein said selecting means is arranged to interrupt said scanning means when a radio station is selected.

30 12. A mobile device as claimed in any preceding claim, wherein the supplementary information conforms to at least one of the Radio Data System standard and the Radio Broadcasting Data System standard.

13. A mobile device as claimed in any preceding claim, further comprising means for receiving and decoding the radio station signal.

5 14. A mobile device as claimed in any preceding claim, wherein the radio station signal is an audio signal and the device comprises means for providing the audio signal to a user.

10 15. A mobile device as claimed in any preceding claim, wherein the radio station signal is a frequency modulated signal.

16. A mobile device as claimed in any preceding claim, wherein the radio station signal is an amplitude modulated signal.

15 17. A mobile device for receiving supplementary information transmitted with a radio station signal, said mobile device comprising:

means for scanning a spectrum of frequencies;

means for detecting a plurality of radio stations broadcast within said spectrum of frequencies;

20 means for decoding, for each of a plurality of detected radio stations, at least one piece of supplementary information broadcast in conjunction with the plurality of radio stations;

25 means for storing at least one piece of supplementary information and information relating to a broadcast frequency of each of a plurality of the detected radio stations; and

means for selecting one of the plurality of detected radio stations according to the supplementary information stored by said storing means.

30 18. A method for selecting a radio station from a plurality of radio stations received by a mobile device, comprising:

scanning a spectrum of frequencies;

detecting a plurality of radio stations broadcast within said spectrum of frequencies;

decoding for each of a plurality of detected radio stations, at least one piece of supplementary information broadcast in conjunction with the plurality
5 of radio stations;

storing at least one piece of supplementary information and information relating to a broadcast frequency of each of a plurality of the detected radio stations; and

selecting one of the plurality of detected radio stations according to the
10 supplementary information stored.

19. A method as claimed in claim 19, comprising the step of:

displaying a set of at least one piece of supplementary information,
each of said at least one piece of supplementary information relating to a
15 corresponding radio station.